To keep your Jandy TruGuard® sanitizer operating properly, it is necessary to change the cartridge every six (6) months.

Compatible with most pool maintenance products."
PRODUCT SPECIFICATIONS
Capacity: For 5,000 – 45,000 gallon pools
Flow Rate: 15 gpm for a 4-hour run
PRECAUTIONARY STATEMENT
CAUTION
In this warning please that a cartridge breakage, media should not be ingested by humans or animals.
FIRST AID
If a cartridge breakage occurs, use only non-metallic items to remove media from the pool water.
DIRECTIONS FOR USE
Always use the recommended treatment for the pool water.
INSTALLATION PROCESS:
Please refer to the Jandy® Operating Manual for installation instructions.

DISPOSAL
After six (6) months of use, discard the cartridge into the pool water.

TOTAL:
100.00%

ote: For directions for use, refer to the Jandy® Owners Manual for start-up instructions.

RETARD:
Active Ingredients:
Metallic Silver* 3.51%
Copper Sulfate pentahydrate 8.23%

Other Ingredients:
88.26%

TOTAL:
100.00%

*From Silver Nitrate

**Copper (Cu) as Metallic
2.09%

***Do not use Jandy TruGuard Cartridge with copper-based algaecides or biguanides.

KEEP OUT OF REACH OF CHILDREN
CAUTION
See back panel for additional precautionary statements.

EPA Reg. No. 67712-1
EPA Est. No. 91258-MEX-1

NET CONTENTS: ONE CARTRIDGE

To keep your Jandy TruGuard™ sanitizer operating properly, it is necessary to change the cartridge every six (6) months.

Product is manufactured with non-metallic ends.

Colors: Black

Size: 4.38 in L x 4.88 in W x 6.88 in H

Box, TruGuard Cartridge CR

C0301100 Rev B
Jandy
TruGuard™
with Nature2® Technology

EPA Reg. No. 67712-1
EPA Est. No. 91258-MEX-1

IMPORTANT
Pool Owner, save this manual! Builders, leave this manual with the pool owner!

Safety Instructions
Important Information
Please read prior to installation

Jandy TruGuard Cartridges have been designed to sanitize swimming pools from 5,000 to 45,000 gallons.

ATTENTION
Failure to heed the following can result in permanent injury or drowning.

EQUIPMENT UNDER PRESSURE
• Always turn pump off prior to installing or changing Jandy TruGuard cartridge. Your pump/filter system is operated under pressure and the pressure must be released before you begin work. Please see your pump/filter owner’s manual for further instructions.

PREVENT CHILD DROWNING
• Do not let anyone, especially small children, sit, step, lean or climb on any equipment installed as part of your pool’s operational system. Locate the components of your operational system at least 3 feet from the pool so children cannot use the equipment to access the pool and be injured or drowned.

LOW CHLORINE RECIPE
• You must strictly follow the low chlorine recipe included in this manual to maintain proper water chemistry and avoid health hazards. Failure to follow these instructions can lead to sickness from bacteria and other noxious organisms.

CAUTION
PRECAUTIONARY STATEMENT
HAZARDS TO HUMANS AND DOMESTIC ANIMALS
CAUTION
In the unlikely event that a cartridge breaks, mineral media should not be ingested by humans or animals as it may cause gastric distress

FIRST AID IF INGESTED: call poison control center or doctor immediately for treatment advice.

The Jandy TruGuard Pool Sanitizer is designed only for residential swimming pools.

* The Jandy TruGuard system consists of the Nature2 technology used in conjunction with a chlorine delivery device or 0.5 ppm of an EPA registered chlorine pool product.
† Nature2 technology consists of the minerals silver and copper.
We ask you to take the time to get familiar with this manual.

Thank you for purchasing Jandy TruGuard. We believe the more you know, the more enjoyable your family’s swimming experience will be – and the more you will reduce the time, effort and cost of maintaining your pool. Pool owners who switch from conventional chemical programs to the Jandy TruGuard system* spend less time maintaining their pools. Every pool has its own characteristics of water type, amount of sunlight, etc. The recipe included in this manual will help ensure good water quality for your pool. Remember, your authorized Jandy dealer can provide advice and service.

Table of Contents

Safety Instructions ............................................... 1
Start Up ................................................................. 3
Balance the Water .................................................. 4
Install the Jandy TruGuard ........................................ 4
Recipe ................................................................. 5
Provide Filtration/Circulation ................................. 6
Jandy Cartridge Replacement Intervals .................. 6
Winterizing Your Pool ............................................ 7
Disposal ............................................................... 8
Troubleshooting ................................................... 8
DIRECTIONS FOR USE:
It is a violation of Federal law to use this product in a manner inconsistent with its labeling.

JANDY TRUGUARD COMPATIBILITY
Jandy TruGuard systems* can be used with all types of pool chemical treatments available except biguanide products and copper based algaecides.

Important: When converting a biguanide treated pool to the Jandy TruGuard system*, the pool must be completely drained and refilled. Then follow the Jandy TruGuard cartridge start-up procedure below.

Start Up
• Before starting up a new Jandy TruGuard cartridge, clean debris and algae out of the pool and pool equipment.

Important: Do not install the new cartridge until the pool water is clean and chemically balanced.

• Balance pool water before installing TruGuard cartridge.

<table>
<thead>
<tr>
<th>pH</th>
<th>7.4-7.8</th>
</tr>
</thead>
<tbody>
<tr>
<td>Calcium hardness</td>
<td>200-400 ppm</td>
</tr>
<tr>
<td>Total alkalinity</td>
<td>80-150 ppm</td>
</tr>
</tbody>
</table>

Consult with your Jandy Dealer for specific water balance instructions.
Balance the Water

To find out if your pool water is balanced:

- take a water sample to your dealer to be tested regularly, or
- ask your dealer to recommend a pool test kit for water balance.

<table>
<thead>
<tr>
<th>pH Range: 7.4-7.8</th>
<th>If it’s too low</th>
<th>The surface of your pool can become etched. Metal parts in the pump and plumbing will corrode.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>How to fix</td>
<td>Add pH increaser.</td>
</tr>
<tr>
<td></td>
<td>If it’s too high</td>
<td>“Scale” forms on the surface of your pool. The water can become cloudy. Equipment can become damaged.</td>
</tr>
<tr>
<td></td>
<td>How to fix</td>
<td>Add pH decreaser.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Calcium Hardness Range: 200-400 ppm</th>
<th>If it’s too low</th>
<th>Water is less stable. In plaster pools, the calcium is taken out of the plaster, causing the surface to deteriorate.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>How to fix</td>
<td>Add calcium hardness increaser.</td>
</tr>
<tr>
<td></td>
<td>If it’s too high</td>
<td>Rough, discolored deposits (“scale”) will form on the pool surface and inside the pool equipment.</td>
</tr>
<tr>
<td></td>
<td>How to fix</td>
<td>Drain or dilute the pool water. Consult your dealer.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Total Alkalinity Range: 80-150 ppm</th>
<th>If it’s too low</th>
<th>It provides no buffer so that you constantly get fluctuating pH readings, which can damage equipment and pool surfaces.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>How to fix</td>
<td>Use an alkalinity increaser.</td>
</tr>
<tr>
<td></td>
<td>If it’s too high</td>
<td>White deposits (“scale”) form on the tile line. The plaster on the pool surface becomes rough or discolored. The water becomes cloudy or milky white.</td>
</tr>
<tr>
<td></td>
<td>How to fix</td>
<td>Add acid to bring alkalinity down.</td>
</tr>
</tbody>
</table>

Install the Jandy TruGuard

1 Install the cartridge after water is balanced. Refer to your Jandy TruGuard operating manual for additional instructions.

2 Superoxidize the pool water with chlorine according to manufacturer’s instructions to burn off contaminants and activate cartridge.

**Important:** Initial superoxidation with chlorine is required to burn off contaminants and activate cartridge.
3 Run the circulating pump either:
   • 24 hours a day for 4 days, maintaining 1-2 ppm free chlorine throughout, or
   • 6 hours a day for 14 days, maintaining 1-2 ppm free chlorine throughout.

4 Let chlorine dissipate to 0.5 ppm once start up period is completed.
   • Do not enter the pool if the free available chlorine residual is over 3 ppm.

Recipe
There is one recipe for maintaining clean, clear, sanitized water with minimum time and effort.

This recipe provides the easiest and most economical way to care for your Jandy TruGuard pool.

<table>
<thead>
<tr>
<th>Ingredients</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Jandy TruGuard Cartridge</td>
<td>Calcium hardness increaser, if needed</td>
</tr>
<tr>
<td>Chlorine granules, tablets, liquid or generator</td>
<td>Water test kit</td>
</tr>
<tr>
<td>pH and total alkalinity adjusting chemicals</td>
<td></td>
</tr>
</tbody>
</table>

Once the 4-day or 14-day start-up period is done, allow the free available chlorine residual to drop to 0.5 ppm (by reducing the amount of chlorine you add) then:

<table>
<thead>
<tr>
<th>When:</th>
<th>What to do:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Every Day</td>
<td>Run pump and filter at least six (6) hours every day.</td>
</tr>
<tr>
<td>Once a week</td>
<td>Balance pH and total alkalinity.</td>
</tr>
<tr>
<td>Twice a week</td>
<td>Check chlorine residual; add chlorine to maintain at least a 0.5 ppm range using the chart below.</td>
</tr>
<tr>
<td>As needed</td>
<td>If water is hazy, superoxidize with chlorine according to manufacturer’s instructions. Additional shocking is recommended following rainstorms or heavy bather load. Do not re-enter the pool if the free available chlorine residual is over 3 ppm.</td>
</tr>
</tbody>
</table>
Add the following amounts of chlorine per 10,000 gallons of water to increase free chlorine by 0.5 ppm.

<table>
<thead>
<tr>
<th>Type of Chlorine Containing Compound</th>
<th>% Active Ingredient</th>
<th>% Active Chlorine Content</th>
<th>Ounce Quantity Required</th>
<th>Gram Quantity Required</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sodium Hypochlorite Liquid</td>
<td>5.25</td>
<td>5.25</td>
<td>12.7</td>
<td>361</td>
</tr>
<tr>
<td>Sodium Hypochlorite Liquid</td>
<td>9.2</td>
<td>9.2</td>
<td>7.3</td>
<td>206</td>
</tr>
<tr>
<td>Sodium Hypochlorite Liquid</td>
<td>10</td>
<td>10</td>
<td>6.5</td>
<td>184</td>
</tr>
<tr>
<td>Sodium Hypochlorite Liquid</td>
<td>12</td>
<td>12</td>
<td>5.6</td>
<td>158</td>
</tr>
<tr>
<td>Calcium Hypochlorite</td>
<td>65</td>
<td>64</td>
<td>1.1</td>
<td>30</td>
</tr>
<tr>
<td>Dichloroisocyanurate</td>
<td>99</td>
<td>62</td>
<td>1.1</td>
<td>30</td>
</tr>
<tr>
<td>Lithium Hypochlorite</td>
<td>29</td>
<td>35</td>
<td>1.9</td>
<td>54</td>
</tr>
<tr>
<td>Trichloro-s-triazintrione</td>
<td>99</td>
<td>90</td>
<td>0.7</td>
<td>21</td>
</tr>
<tr>
<td>Chlorine Gas, from any source including chlorine generators</td>
<td>100</td>
<td>100</td>
<td>0.7</td>
<td>19</td>
</tr>
</tbody>
</table>

Provide Filtration/Circulation

To manage: You need to:

**Circulation**  Follow the manufacturer’s directions for keeping the circulating pump in good working order and operate it at least six (6) hours a day.

Consult your Jandy dealer for optimum run times.

**Filtration**  Check the pool’s filter periodically and clean it as recommended by the manufacturer.

**Jandy Cartridge Replacement Intervals**

1. Always turn pump off prior to installing or changing a Jandy TruGuard cartridge.

2. Your pump/filter is operated under pressure and the pressure must be released before you begin work. Please see your pump/filter owner’s manual for further instruction.

3. A cartridge lasts six (6) months or one season, whichever is shorter. The cartridge should not be used longer than six (6) continuous months.
Winterizing Your Pool
Use these steps as a guide. Consult your dealer for specific information in your area.

Warm Climate
1. Reduce the number of hours the pump runs since the cooler weather decreases the spread of algae and other pollutants.
2. There is no need to superoxidize the pool during cool weather unless the water becomes cloudy (as may occur after a winter storm). See Cloudy Water in Troubleshooting section.

Cold Climate
1. Check total alkalinity and pH of pool to make sure that they are in proper balance.
2. Vacuum the pool bottom to remove any debris or other potential contaminants.
3. Superoxidize the pool with chlorine according to manufacturer’s instructions to clear the water.
4. Add a winter algaecide following manufacturer’s instructions.
5. Backwash the filter.
6. Drain part of the pool water. The amount to drain varies from one part of the country to another. Consult your dealer for advice.
7. Remove the TruGuard cartridge and discard with household trash.
8. Winterize the pipes with pool antifreeze following manufacturer’s instructions.
9. Drain the water out of all equipment (pump, filter, etc.).
10. Store all baskets, hoses and cleaning equipment, indoors if possible.
11. Cover the pool with a winter cover.

Disposal
After six (6) months of use, discard the TruGuard cartridge in household trash. Do not save the cartridge for re-use. The cartridge contains mineral media that is sealed inside. In the unlikely event that a cartridge breaks, remove it and vacuum out any media introduced into the pool.
## Troubleshooting

<table>
<thead>
<tr>
<th>What to look for</th>
<th>Problem</th>
<th>Treatment</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Cloudy Water</strong></td>
<td>Frequently caused by improper start up.</td>
<td>See section on Start Up.</td>
</tr>
</tbody>
</table>
| **Cloudy Water** Slow filter turnover rates. | Poor filtration                              | 1. Backwash and clean filter.  
2. Run filter for 24 hours.  
3. Increase run time per day. |
| **Cloudy Water** Hazy pool water. May have slightly green appearance | Algae growth                                  | Superchlorinate water with chlorine according to manufacturer’s instructions and brush pool walls.                                      |
| **Algae** Pea green color; attaches to the pool walls; and sometimes colors the entire body of water. | Green algae                                  | 1. Check pH and adjust if necessary.  
2. Superchlorinate water with chlorine according to manufacturer’s instructions and brush pool walls.  
3. Repeat steps 1 and 2 until algae is gone. |
| **Algae** Black spots on pool walls. | Black algae                                  | 1. Brush affected areas.  
2. Superchlorinate water with chlorine according to manufacturer’s instructions.  
3. Add algaecide.  
5. Repeat steps 1 through 4 until algae is gone. |
<p>| <strong>Algae</strong> Yellow or brown film on steps or walls | Mustard algae                                |                                                                                                                                        |</p>
<table>
<thead>
<tr>
<th>What to look for</th>
<th>Problem</th>
<th>Treatment</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Stains</strong></td>
<td>Copper or iron from pool equipment corrosion or water supply.</td>
<td>Blue/green&lt;br&gt;1. Adjust pH and total alkalinity to ideal ranges.&lt;br&gt;2. Vigorously brush stained areas.&lt;br&gt;3. Add sequestrant.&lt;br&gt;4. Run filter.&lt;br&gt;5. Twelve hours later, superchlorinate pool.&lt;br&gt;6. Test and balance water.&lt;br&gt;7. Test pool water for dissolved metals.</td>
</tr>
<tr>
<td><strong>Stains</strong></td>
<td>Iron or manganese from equipment corrosion or water supply</td>
<td>Red/brown&lt;br&gt;1. Adjust pH and total alkalinity to ideal ranges.&lt;br&gt;2. Vigorously brush stained areas.&lt;br&gt;3. Add sequestrant.&lt;br&gt;4. Run filter.&lt;br&gt;5. Twelve hours later, superchlorinate pool.&lt;br&gt;6. Test and balance water.&lt;br&gt;7. Test pool water for dissolved metals.</td>
</tr>
<tr>
<td><strong>Stains</strong></td>
<td>Manganese in water supply</td>
<td>Black&lt;br&gt;1. Replace a volume of pool water with water low in hardness and dissolved solids.&lt;br&gt;2. Use sequestrant to prevent scale buildup if high hardness levels are a continuing problem.</td>
</tr>
<tr>
<td><strong>Stains</strong></td>
<td>High native mineral content in water; unbalanced water.</td>
<td>Metal tarnishing&lt;br&gt;1. Replace a volume of pool water with water low in hardness and dissolved solids.&lt;br&gt;2. Use sequestrant to prevent scale buildup if high hardness levels are a continuing problem.</td>
</tr>
<tr>
<td><strong>Scale</strong></td>
<td>High pH and high total alkalinity High TDS (total dissolved solids) or high hardness levels.</td>
<td>Crusty deposits on pool surfaces&lt;br&gt;1. Replace a volume of pool water with water low in hardness and dissolved solids.&lt;br&gt;2. Use sequestrant to prevent scale buildup if high hardness levels are a continuing problem.</td>
</tr>
</tbody>
</table>